External Debt and Inclusive Growth in Nigeria

Rachael Elo-Oghene Morris¹ Johnbosco Chukwuma Ozigbu²* Christopher Ifeanyi Ezekwe³

1. Rivers State University, P.M.B. 5080, Port Harcourt, Nigeria
2. Rivers State University, P.M.B. 5080, Port Harcourt, Nigeria
3. University of Port Harcourt, P.M.B. 5323, Port Harcourt

* E-mail of the corresponding author: johnbosco2008@yahoo.com

ABSTRACT

The growing savings-investment gap in developing economies has focused policy and research attentions on debt-growth nexus. Although a handful of literature has continued to emerge on the impact of external debt on indicators of inclusive growth, relatively very few researches have centered on the different sources of external borrowing. This study examines the link between external debt and inclusive focusing on poverty reduction as the key indicator. The specific objectives are to: determine the impact of external loans from foreign institutions, especially the Paris Club, London Club and Bretton Woods' institutions on poverty reduction in Nigeria. The estimation technique relied on the Stock-Watson Dynamic Least squares (DOLS) method. The Phillips-Perron procedure to unit root test was applied to examine the time series properties of the variables and the result indicates that all the variables are non-stationary at levels. However, the variables are stationary upon differencing, indicating that they are integrated of order one. The result of the Johansen cointegration test indicates that the variables are cointegrated at 5 percent level. The result of the estimated cointegration result reveals that borrowing from the Bretton Woods institutions tends to intensify the problem of poverty in Nigeria. Again, loans from the London Club and servicing of public debt are found to exert insignificant positive influence on poverty reduction in Nigeria. However, the result shows that loan from the Paris Club is negatively related to poverty reduction. The Grandr causality test reveals that unidirectional causality runs from poverty headcount to loan from the Paris Club. Similarly, a unidirectional causality runs from poverty headcount to loan from the London Club. More important, it was found that the Nigeria’s debt to the Bretton Woods institutions causes poverty. In view of the findings, this study recommended that the Debt Management Office (DMO) and Federal Ministry of Finance should draw up plan on the source, allocation and utilization of future loans from external sources with a view to achieving inclusive growth.

Keywords: Inclusive growth, external loans. Bretton Woods, Poverty

1 INTRODUCTION

Governments borrow to fill the vacuum created by the fiscal gaps in the proposed expenditure and expected revenue within a fiscal period. If government does not want to compromise macroeconomic stability by printing more money and if government taxation capability is limited, then debt option becomes the only available avenue that the government can explore to provide social overhead capital for the citizenry. Governments borrow in principle to finance public goods which increase welfare and promote economic growth. Government spending generally has to be financed either through taxation, seigniorage (money printing), or with debt.

External debt is an important source of finance mainly used to supplement the domestic sources of funds for supporting development and other needs of a country. Usually external debt is incurred by a country which suffers from shortages of domestic savings and foreign exchange needed to achieve its developmental and other national objectives. However, if the external debt is not used in income-generating and productive activities, the ability of a debtor nation to repay the debt is significantly reduced.

The effect of external debt on investment and economic growth of a country has remained questionable for policy makers and academics alike. There has not been consensus on the impact of external debt on economic growth. External debt may be used to stimulate the economy but whenever a nation accumulates substantial debt, a reasonable proportion of public expenditure and foreign exchange earnings will be absorbed by debt servicing
and repayment with heavy opportunity costs (Albert, Brain and Palitha, 2005). According to Omoleye, Sharma, Ngussam, and Ezeomu (2006), Nigeria is the largest debtor nation in the Sub-Saharan Africa. The genesis of Nigeria’s external debt can be traced to 1958 when 28 million US dollars was contracted from the World Bank for railway construction.

Between 1958 and 1977, the need for external debt was on the low side. However, due to the fall in oil prices in 1978 which exerted a negative influence on government finances, it became necessary to borrow to correct balance of payment difficulties and finance projects. The resultant effect of large accumulation of debt exposes the nation to high debt burden. Nigeria is about the richest on the continent of Africa, yet due to the numerous macro-economic problems, such as inflation, unemployment, sole dependency on crude oil as a major source of revenue, corruption and mounting external debt and debt service payment, majority of her citizen fall below the poverty line. Accordind, this study explores the impact of loans from Paris Club, London Club and Bretton Woods institutions as well as external debt servicing on poverty headcount in Nigeria during 1981-2015.

2.0 REVIEW OF RELATED LITERATURE

2 Theoretical Framework

The Keynesian theory of increasing government activity as catalyst to economic growth was deemed most appropriate. This is an economic theory named after a British Economist, John Maynard Keynes. The theory is based on the concept that in order for an economy to grow and be stable, active government intervention is required. The Keynesian Economists argue that private sector decisions sometimes lead to inefficiency macroeconomic outcomes. Therefore, monetary policy action by central bank and fiscal policy action by the government are required to direct the economy. These actions will bring about stability in output over the business cycles. Keynes stated that during depression, a combination of two approaches must be applied viz: a reduction in interest rate (monetary policy), and government investment in infrastructure (fiscal policy). Both Keynesians and monetarists believe that both fiscal and monetary policies affect aggregate demand (Blinder, 2008).

The monetary policy requires CBN to reduce interest rate to commercial banks and the commercial banks to do the same to their customers. Government investment in infrastructure injects fund into the economy by creating business opportunities, employment and demand. One of the sources of fund for infrastructural development is external borrowing during fiscal deficit. This implies that Keynesian theory which views capital accumulation as a catalyst to economic growth is supportive of external loans as it injects fund into the economy to increase economic activity resulting in growth. It therefore supports a positive relationship between external debt and economic growth.

2.2 Conceptual Framework.

Arnone, Bandiera and Presbitero (2005) described external debt as that part of a country’s debt that was borrowed from foreign lenders including commercial banks, governments or international financial institutions. External debt becomes necessary when domestic financial resources become inadequate to finance public goods that increase welfare and engender economic growth. External debts are funds sourced from outside the nation’s boarder usually in foreign currency and are interest-bearing to finance specific project(s). The effect of external debt on a nation’s economy has been a subject of controversy among academics. Some were of the view that external debt accelerates economic growth (Hameed, Ashraf and Chandhary, 2008). This view is in line with neoclassical model of economic growth –the Keynesian theory in which capital accumulation is viewed as a catalyst to economic growth.

The proponents that external debt has negative impact on the economy stem from the fact that at certain level, debt accumulation becomes a burden and will no longer stimulate the economic growth (Elbadawi, Ndulu and Ndungu, 1996). Furthermore, the liquidity constraint referred to as ‘crowding out’ effect of debt, that is, the need to service debt reduces funds available for investment and growth. Debt servicing is like the proboscis of mosquito for sucking out blood from its victim. The guiding rules for debt to be taken into account in debts management are, debt to GDP ratio, which global maximum ratio is 40%; total debt to total revenue ratio and debt to debt service ratio.
2.3 Empirical Literature

Audu (2004) examined the impact of external debt on economic growth and public investment in Nigeria from 1970-2002. The empirical investigation was done using the Co-integration test and Error Correction Method. The study shows that debt servicing pressure in the country has had a significant adverse effect on the growth process, and past debt accumulation negatively affect public investment.

Ayadi and Ayadi (2008) examined the impact of the huge external debt, with its servicing requirements on economic growth in Nigerian and South African economies. The Neoclassical growth model which incorporates external debt, debt indicators, and some macroeconomic variables was employed and analyzed using both Ordinary Least Square (OLS) and Generalized Least Square (GLS) methods. Their finding revealed negative impact of debt and its servicing requirement on the economic growth of Nigeria and South Africa.

Adesola (2009) empirically investigated the effect of external debt service payment practices on the economic growth of Nigeria. Ordinary Least Square method of multiple regression was used to examine how debt payment to multilateral financial creditors, Paris club creditors, London club creditors, Promissory Notes holders and other creditors relates to gross domestic product (GDP) and gross fixed capital formation (GFCF) using data from 1981 to 2004. The study provides evidence that debt payment to Paris club creditors and Promissory Notes holders are positively related to GDP and GFCF while debt payment to London club creditors and other creditors show a negative significant relation to GDP and GFCF.

Amooteng and Amoako (1996) investigated the relationship between external debt and economic growth in 35 African countries. Granger causality test was applied. The result showed a unidirectional and positive causal relationship between economic growth and debt servicing Sulaiman and Azeez (2012) studied the effect of external debt on the economic growth of Nigeria using gross domestic product as the endogenous variable measuring economic growth as a function of ratio of external debt to export, inflation and exchange rate proxy as the exogenous variable. Data were gathered covering 1970-2010. Analysis of date was done using the econometric technique of ordinary least square. The result showed that external debt has contributed positively to Nigeria economy.

3 MATERIALS AND METHODS

3.1 Research Design

This study adopted quasi-experimental research design. The choice of this approach emanates from the nature of data required and its suitability in assessing the impact of multivariate explanatory variables on a single dependent variable.

3.2 Model Specification

This study employs a single equation cointegration regression model. It builds on the work of Oyedele et al. (2013) with some modifications due to the disaggregation of external borrowing into its key three sources comprising the Paris Club, London Club and Bretton Woods institutions. Notably, poverty headcount is used as a proxy for inclusive growth. The model is specified in functional form as:

\[ \text{POV} = f (\text{DPC}, \text{DLC}, \text{DBW}, \text{DSR}) \]  

(3.1)

Where: POV is poverty headcount (percentage of the population), DPC is loan from the Paris Club, DLC is loan from the London Club, DBW is loan from Bretton Woods institutions and DSR is public debt serving

The single equation cointegration model of the DOLS variety of equation (1) is formalized as follows:

\[ \text{POV}_t = \alpha_0 + \alpha_1 \text{DPC}_t + \alpha_2 \text{DLC}_t + \alpha_3 \text{DBW}_t + \alpha_4 \text{DSR}_t + \sum_{p=1}^{n} \theta_1 \Delta \text{DPC}_{t-y} + \sum_{p=1}^{n} \theta_2 \Delta \text{DLC}_{t-y} + \sum_{p=1}^{n} \theta_3 \Delta \text{DBW}_{t-y} + \sum_{p=1}^{n} \theta_4 \Delta \text{DSR}_{t-y} + \sum_{t} \epsilon \]  

(3.2)

Where: POV, DPC, DLC, DBW and DSR are as previously defined. \( \alpha_0 = \) Constant Term, \( \alpha_1 - \alpha_4 = \) Long run Multipliers, \( n \) and \( y = \) Optimal lag length and lead lengths respectively

\( \Delta = \) First difference operator, \( \sum_{t} \) = Stochastic error process
The a priori expectations require that $\kappa_1 < 0$, $\kappa_2 < 0$, $\kappa_3 < 0$ and $\kappa_4 > 0$.

3.3 Data Collection Methods and Sources

Secondary data is required for this study. Specifically, the datasets involve annual time series spanning from 1981 to 2015 which are adapted from the CBN (2015) Statistical Bulletin and World Bank World Development Indicator (2015).

3.4 Method of Data Analysis/ Estimation Procedure

This study relied on the Dynamic Least Squares (DOLS) credited to Stock and Watson (1993) as the analytical method in investigating the link between external debt and inclusive growth. The rationale for the DOLS is due to its improvement on the Ordinary least Squares by producing robust result and coping with small observations and dynamic sources of bias in large sample. Again, the DOLS is considered effective in correcting for serial correlation and endogeneity in the explanatory variables by adding leads and lags to first differences of the explanatory variables. This study provided for some economic/theoretical a priori tests, statistical test of significance and econometric or second order tests. Some of these tests are discussed below.

1. Unit Root Test

This test is conducted to determine the stationarity status of each of the variables under investigation. This test is necessary in order to avoid the existence of biased and inconsistent estimates. Thus, the Phillips-Perron (PP) procedure to unit root test is applied and the general model with constant and trend is expressed below:

$$\Delta R_t = \omega_0 + \omega_1 R_{t-1} + \sum_{i=1}^{b} \beta_i \Delta R_{t-i} + \lambda_t$$

(2)

Where: $R_t =$ variables in the model, $\omega_1$ and $\beta_i =$ parameter estimate of the variables, $b =$ lag length, $\Delta =$ First difference operator, $\lambda_t =$ Random error term.

2. Co-Integration Test

This test used to find-out if the variables included in the model have long-run relationship. The Johansen system of cointegration test is applied in carrying out this test. The Max-Eigen statistic and Trace statistic form basis for rejecting the null hypothesis of no cointegration among the underlying variables.

3.5 Variable Description

i. Poverty headcount (POV):

This refers to the proportion of the population that lives below the poverty line. It is measured in percentage and used as the dependent variable and a proxy for inclusive growth in this study.

ii. Loan from Paris Club (DPC):

This refers to funds borrowed from foreign governments under the aegis of the Paris Club with long term repayment plan. It mostly describes borrowing by governments in developing countries from developed countries’ government. Traditional participants among Paris Club creditors are the OECD country governments; although in any single meeting any number, up to one-half of these, actually participate. It is expected to contribute to poverty reduction by narrowing the savings-investments gap in developing economies.

iii. Loan from London Club (DLC):

This comprises loans accessed by the government from foreign commercial banks repayable within a specified period of time. Debt rescheduling from the London Club creditors members is mostly difficult. Increase in loans from the London Club is expected to boost inclusive growth and reduce poverty.

iv. Loan from Bretton Woods Institutions (DBW):

This is often referred to as multilateral loans often sourced from Bretton Woods institutions, especially the World Bank and IMF. It is mainly invested into economic activities with high potential of driving development. It is expected that increase in World Bank and IMF loans will create economic opportunities necessary for reducing poverty and achieving other macroeconomic indicators of inclusive growth.
v. Debt servicing (DER): This defines the amount spent on repayment of interest and principal on outstanding public debt. As the size of the debt grows or as interest rate rises, debt service charge increases (Oyedele, 2013). Increase in debt service is expected to intensify poverty problem.

4 RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 4.1: Descriptive statistics for the series

<table>
<thead>
<tr>
<th></th>
<th>POV</th>
<th>DPC</th>
<th>DLC</th>
<th>DBW</th>
<th>DSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>58.49686</td>
<td>668.6743</td>
<td>54.82657</td>
<td>306.5089</td>
<td>218.3069</td>
</tr>
<tr>
<td>Median</td>
<td>61.33000</td>
<td>75.45000</td>
<td>14.99000</td>
<td>102.6300</td>
<td>68.54000</td>
</tr>
<tr>
<td>Maximum</td>
<td>88.00000</td>
<td>4196.840</td>
<td>228.9500</td>
<td>1489.400</td>
<td>1060.380</td>
</tr>
<tr>
<td>Minimum</td>
<td>32.00000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.180000</td>
<td>1.010000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>14.62900</td>
<td>1173.027</td>
<td>76.96726</td>
<td>359.4741</td>
<td>286.2331</td>
</tr>
<tr>
<td>Observations</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: Estimated by the Authors

The descriptive statistics reported in Table 4.1 shows that the poverty headcount averaged 58.49% from 1980-2015, indicating that more than half of the Nigerian population is poor. The average value for DPC, DLC, DBW and DSR are 668.67, 54.82, 306.50 and 218.30 billion naira. This suggests that, on the average, the Paris Club is the highest creditor to Nigeria during the period considered. The standard deviation shows that only poverty headcount clustered around its mean value while the other variables are divergent from their corresponding mean values.

4.2 Unit Root Test

The unit root test is employed to determine whether or not the series are stationary. Specifically, the Phillips-Perron (PP) unit root test procedure is relied upon in testing the null hypothesis of a unit root against the alternative hypothesis of no unit root at 5 percent level. The results are summarized below in Table 4.2.

Table 4.2: Phillips-Perron (PP) unit root test results

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variables</th>
<th>Levels</th>
<th>Critical value (5%)</th>
<th>Critical value (5%)</th>
<th>Order of integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>POV</td>
<td>-2.013</td>
<td>-3.548</td>
<td>-5.662</td>
<td>I(1)</td>
</tr>
<tr>
<td>2</td>
<td>DPC</td>
<td>-1.364</td>
<td>-3.548</td>
<td>-3.400</td>
<td>I(1)</td>
</tr>
<tr>
<td>3</td>
<td>DLC</td>
<td>-1.632</td>
<td>-3.548</td>
<td>-5.00</td>
<td>I(1)</td>
</tr>
<tr>
<td>4</td>
<td>DBW</td>
<td>-2.654</td>
<td>-3.548</td>
<td>-3.810</td>
<td>I(1)</td>
</tr>
<tr>
<td>5</td>
<td>DSR</td>
<td>0.311</td>
<td>-3.548</td>
<td>-6.069</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

Source: Estimated by the Authors

Table 4.2 reports the unit root test result at both levels and first difference. It was uncovered that the all variables are non-stationary at levels. This is because the computed PP statistics are less than their corresponding critical values in absolute terms. The differencing of the series ensures stationarity at first difference. Hence, the variables are integrated of order one I(1). The outcome of this unit root test informs the test for cointegration using Johansen maximum likelihood procedure.

4.3 Cointegration Test

Following the non-stationarity of the series at levels, the Johansen procedure to cointegration was applied to determine if their linear combinations enhance the possibility of establishing long run relationship among them. The results are summarized in Table 4.3
Table 4.3: Summary of cointegration test results

<table>
<thead>
<tr>
<th>Series: POV DPC DLC DBW DSR</th>
<th>Trace stat.</th>
<th>Max-Eigen Stat.</th>
<th>Hypothesized No. of CE(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>190.37</td>
<td>105.75</td>
<td></td>
<td>None *</td>
</tr>
<tr>
<td>(69.81)</td>
<td>(33.87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>84.62</td>
<td>55.20</td>
<td>At most 1*</td>
<td></td>
</tr>
<tr>
<td>(47.85)</td>
<td>(27.58)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.419</td>
<td>17.63</td>
<td>At most 2</td>
<td></td>
</tr>
<tr>
<td>(29.79)</td>
<td>(21.13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.78</td>
<td>10.22</td>
<td>At most 3</td>
<td></td>
</tr>
<tr>
<td>(15.49)</td>
<td>(14.26)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.56</td>
<td>1.56</td>
<td>At most 4</td>
<td></td>
</tr>
<tr>
<td>(3.84)</td>
<td>(3.84)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Estimated by the Authors

NB: * implies rejections of null hypothesis of no cointegration at 5 percent level, Figures in parenthesis are critical values at 5 percent level.

Both the Trace and Maximum Eigenvalue statistics show two cointegrating equations at 5 percent level. This is indicative that the variables are cointegrated. Following the stationarity of the series at first difference and establishment of long run relationship among them, the Dynamic Least Squares (DOLS) is considered as the appropriate single equation estimation approach which corrects for endogeneity in the regressors through the addition of leads and lags of the explanatory variables.

4.4 Estimation of the Dynamic Ordinary Least Squares (DOLS) model

The DOLS was applied to provide robust and long run estimates of the explanatory variables. The result is summarized in Table 4.4.

Table 4.4: Estimated cointegration regression model

<table>
<thead>
<tr>
<th>Dependent Variable: POV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method: Dynamic Least Squares (DOLS)</td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>DPC</td>
</tr>
<tr>
<td>DLC</td>
</tr>
<tr>
<td>DBW</td>
</tr>
<tr>
<td>DSR</td>
</tr>
<tr>
<td>C</td>
</tr>
</tbody>
</table>

R-squared: 0.917117 | Mean dependent var: 59.95500
Adjusted R-squared: 0.828708 | S.D. dependent var: 13.87648
S.E. of regression: 5.743127 | Sum squared resid: 494.7527
Durbin-Watson stat: 2.041252 | Long-run variance: 20.90109

Source: Estimated by the Authors

Table 4.4 shows the results of the cointegration regression result. All the variables except Nigeria’s debt to the Paris Club appear with positive sign, indicating that they intensify the problem of poverty and thus impair inclusive growth in Nigeria. Only debt to the Bretton Woods institutions is significant in explaining changes in poverty headcount in Nigeria. This is a pointer that loans from the World Bank and IMF tend to aggravate rather than reduce poverty in Nigeria. Loans from Paris Club (foreign governments) seem to be helpful in reducing poverty in Nigeria, but its allocation and utilization tend to limit its effectiveness. The negative impact of the Paris Club loan on poverty reduction in Nigeria could be partly attributed to the debt pardon granted to Nigeria by the members in 2005. The coefficient of determination reveals that the underlying explanatory variables accounts for approximately 92 percent variations in poverty headcount in Nigeria. This is indicative the model is
of a good fit. The Durbin-Watson test for serial correlation indicates that the model is free from positive serial correlation at 5 percent level. It therefore, follows that the model can be relied upon for policy formulation.

4.4.1 Post-estimation Tests

i. Wald test

The Wald test or F-test is applied to test for the joint significant of the slope coefficients at 5 percent level. The result is reported in Table 4.5.

Table 4.5: Wald test result

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>Value</th>
<th>Df</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>47.01697</td>
<td>(4, 15)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Chi-square</td>
<td>188.0679</td>
<td>4</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Null Hypothesis: C(1)=C(2)=C(3)=C(4)=0

Null Hypothesis Summary:

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Std. Err.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C(1)</td>
<td>-0.004101</td>
<td>0.006533</td>
</tr>
<tr>
<td>C(2)</td>
<td>0.042102</td>
<td>0.090751</td>
</tr>
<tr>
<td>C(3)</td>
<td>0.145933</td>
<td>0.027432</td>
</tr>
<tr>
<td>C(4)</td>
<td>0.036945</td>
<td>0.066687</td>
</tr>
</tbody>
</table>

Source: Estimated by the Authors

The result in Table 4.5 shows that the coefficients of the explanatory are jointly significant in explaining changes in the poverty headcount in Nigeria during the sampled period. This suggests that taken together, the regressors can form basis for predicting changes in poverty headcount. In other words, the overall model is considered to satisfy statistical criteria.

ii. Normality test

The normally test is employed determine whether or the residuals are normally distributed. The result is presented in Figure 4.1

Figure 4.1: Normality test result

Source: Estimated by the Authors

The normality test result reveals that the residuals are normality distributed at 5 percent level. This is because the probability value of the Jarque-Bera statistics is greater than the 0.05. Hence, this study fails to reject the null hypothesis of normal distribution for the residuals.
4.5 Causality Test

The Granger causality test is utilized to determine the direction of causal relationship between the variables. The null hypothesis of no causality is tested using chi-square distributed statistics at 5 percent level. The results of the test are reported in Table 4.6.

Table 4.6: Result of Granger causality test

<table>
<thead>
<tr>
<th>Causality</th>
<th>DF</th>
<th>X²-stat.</th>
<th>P-value</th>
<th>Inference</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPC → POV</td>
<td>2</td>
<td>2.490</td>
<td>0.2878</td>
<td>Cannot reject</td>
</tr>
<tr>
<td>POV → DPC</td>
<td>2</td>
<td>7.234</td>
<td>0.0269</td>
<td>Rejected</td>
</tr>
<tr>
<td>DLC → POV</td>
<td>2</td>
<td>2.754</td>
<td>0.2523</td>
<td>Cannot reject</td>
</tr>
<tr>
<td>POV → DLC</td>
<td>2</td>
<td>7.128</td>
<td>0.0283</td>
<td>Rejected</td>
</tr>
<tr>
<td>DBW → POV</td>
<td>2</td>
<td>6.432</td>
<td>0.0401</td>
<td>Rejected</td>
</tr>
<tr>
<td>POV → DBW</td>
<td>2</td>
<td>3.5055</td>
<td>0.1733</td>
<td>Cannot reject</td>
</tr>
<tr>
<td>DSR → POV</td>
<td>2</td>
<td>4.361</td>
<td>0.1130</td>
<td>Cannot reject</td>
</tr>
<tr>
<td>POV → DSR</td>
<td>2</td>
<td>0.939</td>
<td>0.6251</td>
<td>Cannot reject</td>
</tr>
<tr>
<td>DPC, DLC, DBW and DSR → POV</td>
<td>8</td>
<td>13.65456</td>
<td>0.0912</td>
<td>Cannot reject</td>
</tr>
</tbody>
</table>

Source: Estimated by the Author

Table 4.6 shows the causality test results. It was observed from the result that a unidirectional causality runs from poverty headcount to Nigeria’s debt to the Paris Club. This is because the p-value of the chi-square statistics falls below 0.05. Similarly, a unidirectional causality runs from poverty headcount to Nigeria’s debt to the London Club. More importantly, the null hypothesis of no joint causality from the external debt sources cannot be rejected at 5 percent level, but not at 10 percent level.

5 CONCLUSION AND POLICY RECOMMENDATION

The extent to which the money borrowed from foreign governments, Bretton Woods’ institutions such as the World Bank and IMF and the London Club members amongst others help in achieving inclusive growth through poverty reduction has remained a source of worry to policy makers, development partners and other stakeholders in the economy. Using the Stock-Watson Dynamic Least Squares (DOLS) estimation approach, this study explores the long term impact of external debt on inclusive with particular emphasis on poverty reduction. It was observed from the estimated cointegrating regression model that borrowing from the multilateral sources, especially Bretton Woods institutions seem to intensify the problem of poverty in Nigeria. Again, loans from the London Club and servicing of public debt are found to exert insignificant positive influence on poverty reduction in Nigeria. More so, loans from the Paris Club, especially foreign governments tend to contribute to reduction of poverty, but their impact seem to be insignificant. This could be traced to the poor policy direction for investing the borrowed funds to socio-economic indicators capable of stimulating inclusive growth through poverty reduction. It is therefore concluded that on balance external debt seem to be ineffective in meeting the savings-investment gap to reduce poverty in Nigeria. In the light of the findings, it is recommended that the Debt Management Office (DMO) and Federal Ministry of Finance should draw up plan on the source, allocation and utilization of future loans from external sources with a view to achieving inclusive growth.

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